

IN THE CLAIMS

1. (currently amended) A connection component for a microelectronic element assembly, said component comprising:

A. a support structure having a dielectric layer, a plurality of first regions, a second region, and a top surface, wherein the top surface is defined by the plurality of first regions and the second region;

B. a plurality of adhesion promoter regions, each of said adhesion promoter regions being associated with one of said plurality of first regions, disposed over the associated first region, and comprised of an adhesion promoter;

C. a plurality of leads disposed on the dielectric layer, each of said leads having a terminal end associated with one of said plurality of adhesion promoter regions and permanently connected to the associated adhesion promoter region, and a tip end releasably attached to the second region and offset from the terminal end; and

D. a plurality of release interfaces, each of said release interfaces being associated with a tip end, wherein each of said release interfaces is located between the associated tip end and the second region of the support structure and wherein each of said release interfaces is free of the adhesion promoter.

2. (canceled)

3. (canceled)

4. (canceled)

5. (currently amended) A connection component for a microelectronic element assembly, said component comprising:

A. a support structure having a dielectric layer, a plurality of first regions, a second region, and a top surface, wherein the top surface is defined by the plurality of first regions and the second region;

B. a plurality of leads disposed on the top surface of said support structure, each of said leads having a terminal end permanently connected to the second region; and a tip end associated with one of the plurality of first regions, disposed

over the associated first region, and offset from the terminal end; and

C. a plurality of release interfaces, each of said release interfaces corresponding to one of said plurality of leads, located between the tip end of the corresponding lead and the associated first region of said support structure, and formed by locally heating the tip end of the corresponding lead.

6. (canceled)

7. (original) A connection component for a microelectronic element assembly, said component comprising:

A. a support structure having a dielectric layer, a plurality of first regions, a second region, and a top surface, wherein the top surface is defined by the plurality of first regions and the second region;

B. a plurality of leads disposed on the top surface, each of said leads having a terminal end permanently connected to the second region; and a tip end associated with one of the plurality of first regions, disposed over the associated first region, and offset from the terminal end; and

C. a plurality of release interfaces, each of said release interfaces corresponding to one of said plurality of leads, located between the tip end of the corresponding lead and the associated first region of said support structure, and formed by depositing a heat susceptible material on each of the plurality of first regions.

8. (original) A connection component for a microelectronic element assembly, said component comprising:

A. a support structure having a dielectric layer, a plurality of first regions, a second region, and a top surface, wherein the top surface is defined by the plurality of first regions and the second region;

B. a plurality of polymer layers, each of said polymer layers being associated with one of said plurality of first region, disposed over the associated first region, and comprised of a polymer, wherein the plurality of polymer layers is formed by electrophoretically depositing the polymer over the plurality of first regions; and

C. a plurality of leads disposed on the top surface, each of said leads having a terminal end permanently connected to the second region; and a tip end associated with one of the plurality of polymer layers, releasably attached to the associated polymer layer, and offset from the terminal end;

wherein the second regions is free of said polymer.

9. (canceled)

10. (canceled)

11. (canceled)

12. (canceled)

13. (original) A connection component for a microelectronic element assembly, said component comprising:

A. a support structure having a dielectric layer, a plurality of first regions, a second region, and a top surface, wherein the top surface is defined by the plurality of first regions and the second region;

B. a plurality of conductive layers, wherein each of the conductive layers is associated with one of the plurality of first regions, disposed on the associated first region, and comprised of a first conductive material; and

C. a plurality of leads formed on the second region and the plurality of conductive layers, each of the leads having a terminal end connected to the second region; and a tip end associated with one of the plurality of conductive layers, connected to the associated conductive layer, offset from the terminal end, and comprised of a second conductive material;

wherein the melting point of the second conductive material is higher than the melting point of the first conductive material.

14. (canceled)

15. (canceled)

16. (canceled)

17. (canceled)

18. (original) A connection component for a semiconductor assembly, said component comprising:

A. a support structure having a dielectric layer and a top surface;

B. a copper layer disposed over the top surface, said copper layer having a plurality of first regions and a second region;

C. a plurality of graphite regions disposed over the plurality of first regions, each of said plurality of graphite regions associated with one of said plurality of first regions and prepared by depositing graphite over the associated first regions; and

D. a plurality of leads disposed over the copper layer, each said lead having a terminal end permanently attached to said second region; and a tip end offset from the terminal end, associated with one of said plurality of graphite regions, and releasably connected to the associated graphite region.

19. (currently amended) A connection component for a semiconductor assembly, said component comprising:

A. a support structure having a dielectric layer and a top surface;

B. a plurality of first ~~boding~~ bonding pads disposed on the top surface; wherein each first bonding pad is comprised of a first conductive material;

C. a plurality of second bonding pads disposed on the top surface, wherein each of the second bonding pads is associated with one of the first bonding pads and is comprised of a second conductive material; and

D. a plurality of leads, wherein each lead has a terminal end permanently connected to one of the plurality of first bonding pads; and a tip end connected to the associated second bonding pad and offset from the terminal end;

wherein the permanent connection between the terminal end and the first ~~boding~~ bonding pad is stronger than the connection between the tip end and the associated second bonding pad.